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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,454	08/26/2003	Makoto Kitano	Q76961	3244
23373	7590	09/27/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			YAMNITZKY, MARIE ROSE	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,454

Applicant(s)

KITANO ET AL.

Examiner

Marie R. Yamnitzky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Claims 1-24 are generic to a plurality of disclosed patentably distinct species comprising

(1) polymers comprising a repeating unit of formula (1) wherein (a) each of a and b is 0, or (b) a is 1 and b is 0, or (c) a is 0 and b is 1; or

(2) polymers comprising a repeating unit of formula (2) wherein l, m, n, o and p are selected to provide one of the numerous patentably distinct combinations within the scope of the claims;

wherein for (1) or (2), each Ar variable that is present in the repeating unit is independently selected from (i) an arylene group or (ii) a divalent heterocyclic group, and each E variable present in the repeating unit is independently selected from (iii) an aryl group or (iv) a monovalent heterocyclic group.

(With respect to (2), there are at least 22 different combinations for l, m, n, o and p within the scope of claim 1, ranging from the combination in which l is 2 and each of m, n, o and p is 0 to the combination in which each of l, m and n is 2 and each of o and p is 1.)

In addition, claim 11 is generic for a plurality of disclosed patentably distinct species comprising

polymers further comprising a repeating unit of formula (4), (5), (6) or (7) wherein each Ar variable present in the additional repeating unit is independently selected from (v) an arylene group, (vi) a divalent heterocyclic group, or (vii) a divalent group having a metal-complex structure, X_1 is selected from (viii) $-\text{CR}_2=\text{CR}_3-$, (ix) $-\text{C}\equiv\text{C}-$, or (x) $-(\text{SiR}_5\text{R}_6)_d-$, and X_2 is selected from (xi) $-\text{CR}_2=\text{CR}_3-$, (xii) $-\text{C}\equiv\text{C}-$, (xiii) $-\text{N}(\text{R}_4)-$ or (xiv) $-(\text{SiR}_5\text{R}_6)_d-$.

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Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. That is, applicant is required to elect one of formula (1) or formula (2), make further elections with respect to variables a and b if formula (1) is elected, make further elections with respect to variables l, m, n, o and p if formula (2) is elected, make further elections with respect to the Ar and E variables present based on the preceding elections and, with respect to claim 11, elect one of formulae (4), (5), (6) or (7) and make further elections with respect to the variable(s) present in the elected one of (4), (5), (6) or (7).

For example, one possible species within the scope of the claims is a polymer of formula (1) in which each of a and b is 0, each of Ar₁ and Ar₃ is an arylene group, and E₃ is aryl group (A), wherein, for claim 11, the polymer further comprises a repeating unit represented by formula (4) wherein Ar₁₂ is an arylene group.

Applicant is further required to select an ultimate species (a specific polymer) to be used by the examiner as the starting point for search and examination purposes.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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No telephone call was made to request an oral election to the above election of species requirement due to the complexity of the requirement.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY
September 23, 2005



MARIE YAMNITZKY
PRIMARY EXAMINER

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